ABSTRACT

- 1 A wireless optical communication systems using two
- 2 optical transceivers located at the opposite ends of an
- 3 optical communication line. The optical communication
- 4 system can be either two-element, when each of the said
- 5 transceivers contains one optical transmitter (emitter)
- 6 and one optical receiver, or it can be four-element,
- 7 where each of the said transceivers contains two optical
- 8 transmitters and two optical receivers. The output of
- 9 each of the optical transmitters is a diverging beam of
- 10 incoherent electromagnetic radiation arranged to have a
- 11 cross sectional diameter which is larger than the cross
- 12 sectional diameter of the respective optical receiver at
- 13 that point on the communication line at which the
- 14 respective optical receiver is situated. The invention
- 15 reduces the probability of communication failure, higher
- 16 noise resistance, and lowers operation and production
- 17 costs.